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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/813,415

03/21/2001

Mark Dilman

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09/26/2006

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EXAMINER

BILGRAMI, ASGHAR H

ART UNIT

PAPER NUMBER

2143

DATE MAILED: 09/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/813,415

Applicant(s)

DILMAN ET AL.

Examiner

Asghar Bilgrami

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-14 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1 and 4-14 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 21 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/30/2006 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mandel et al (U.S. 6,170,009) and Robinson et al (U.S. 6,570,867).

4. As per claims 1 & 7 Mandal disclosed a method for monitoring usage of resources allocated to a plurality of nodes of a network (col.1, lines 53-67 & col.2, lines 1-7) comprising the steps of (a) assigning to a node, a parameter indicative of the usage of

said resources, (b) locally monitoring at the node a rate of change of the usage of said resources (col.3, lines 45-54 & col.4, lines 1-14); (c) reporting to a centralized management station of the network when the rate of change of the usage exceeds a first predetermined threshold (col.3, lines 54-67). However Mendal did not explicitly disclose initiating after a "safe" period a global poll of resources of at least one other node from the plurality of nodes of the network by the centralized management station in response to reporting from the node.

In the same field of endeavor Robinson disclosed initiating a global poll of resources of at least one other node from the plurality of nodes of the network by the centralized management station in response to reporting from the node (col.2, lines 60-67, col.3, lines 1-12, col.5, lines 3-55, col.12, lines 26-44 & col.13, lines 46-58).

It would have been obvious to one in the ordinary skill in the art at the time the invention was made to have incorporated central management station initiating a poll of resources of at least one node in response to the reporting from the node disclosed by Robinson in a method of monitoring usage of resources in nodes of a network as disclosed by Mandal in order to improve the management and monitoring of paths and routes available in a network resulting in a more stable and robust network for users.

5. As per claim 4 Mandal-Robinson disclosed the method of claim 1, wherein parameter is indicative of typical usage of the resources in the node (Mandal col.3, lines 45-67).

6. As per claim 5 Mandal-Robinson disclosed the method of claim 1, wherein said parameter is indicative of the rate of a change of usage of the resources in the node (Mandal col.3, lines 45-67).

7. As per claim 6 Mandal-Robinson disclosed the method of claim 1, further including the step of adjusting the usage of the resources in the node (Mandal col.6, lines 1-27).

8. As per claim 8 Mandal disclosed a method of monitoring usage of resources in nodes of a network (col.1, lines 53-67 & col.2, lines 1-7), comprising the steps of: asynchronous reporting to a management station of the network of an event when a rate of change of a usage of at least one resource of said resources in any of said node deviates from a prescribed norm (col.3, lines 1-67 & col.4, lines 1-14). However Mandal did not explicitly disclose periodic polling of the said nodes in accordance with a polling interval, and a periodic polling of said nodes in response to reporting of said event, wherein a tunable parameter is adjusted in response to the usage. In the same field of endeavor Robinson disclosed periodic polling of the said nodes in accordance with a polling interval, and a periodic polling of said nodes in response to reporting of said event node (col.2, lines 60-67, col.3, lines 1-12, col.5, lines 3-55, col.12, lines 26-44 & col.13, lines 46-58), wherein a tunable parameter is adjusted in response to the usage (col.7, lines 59-64).

It would have been obvious to one in the ordinary skill in the art at the time the invention was made to have incorporated central management station initiating a poll of resources of at least one node in response to the reporting from the node disclosed by Robinson in a method of monitoring usage of resources in nodes of a network as disclosed by Mandal in order to improve the management and monitoring of paths and routes available in a network resulting in a more stable and robust network for users.

9. As per claims 9 & 10 Mandal disclosed a technique for managing a global resource of a network in order to reduce the amount of monitoring related traffic, comprising the steps of partitioning the global resource into a plurality of node resources, wherein each node resource is assigned to a separate node of the network, assigning a budget to each said node resource; reporting to a management station of the network when a node exceeds the assigned budget, as determined using local monitoring to the node resource; determining whether the sum of the reported values of the reporting nodes plus an upper bound of the vales for the non-reporting nodes exceeds a threshold; and generating an alarm if the sum of the variables of the nodes exceeds the threshold (col.4, lines 52-56 & col.5, lines 31-44). However Mandal did not explicitly disclose initiating a poll by the management station of node resource usage by the nodes of the network in response to receiving reporting from the node wherein the assigned budget is exceeded in at least one node.

In the same field of endeavor Robinson disclosed initiating a poll of node resource usage by the nodes of the network when the assigned budget is exceeded in at least one node (col.2, lines 60-67, col.3, lines 1-12, col.5, lines 3-12, col.12, lines 26-44 & col.13, lines 46-58).

It would have been obvious to one in the ordinary skill in the art at the time the invention was made to have incorporated initiating a poll of resources of at least one node when assigned budget is exceeded as disclosed by Robinson in a technique for managing a global resource of a network as disclosed by Mandal in order to improve the management and monitoring of paths and routes available in a network resulting in a more stable and robust network for users.

10. As per claim 11 Mandal-Robinson disclosed the method defined in claim 8 wherein said nodes are selected from the group consisting of routers, switches, bridges and firewall devices (Mandal col.7, lines 29-39).

11. As per claim 12 Mandal-Robinson disclosed the method defined in claim 8 wherein said nodes are selected from the group consisting of servers, hosts, and layer 4-7 switches (Mandal col.2, lines 66-67 & col.3, lines 1-12).

12. As per claims 13 & 14 Mandal-Robinson disclosed the method comprising: (e) summing all the reported rate of change of the usage of the resources; and (e)

generating an alarm if the sum exceeds a second threshold, else setting the "safe" period and repeat steps (c-f) (Robinson, col.4, lines 52-56 & col.5, lines 31-55).

Response to Arguments

13. Applicant's arguments filed 06/30/2006 have been fully considered but they are not persuasive.

14. Applicant argued that neither Mandel nor Robinson disclose the newly amended claim limitation in the independent claims.

15. As to applicant's argument please see office action above in which the cited portions of Mendal and Robinson teach the amended limitations.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Asghar Bilgrami whose telephone number is 571-272-3907. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on 571-272-3924. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


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